Montana Fish, Wildlife & Parks

February 24, 2000

1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
- Fisheries Division
- Endangered Species Coordinator
- Nongame Coordinator
- Great Falls Office

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Lewis and Clark County Conservation District
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Hydrotech Water Resource Consultants, P.O. Box 9237, Helena, MT 59604
Mr. Tim Burton, 4250 Red Fox Drive, Helena, MT 59601

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for a Future Fisheries Project tentatively planned to restore to proper dimension, pattern and profile approximately 270 feet of stream channel on Virginia Creek (a tributary to Canyon Creek). This proposed project is located on property owned by Mr. Tim Burton approximately 9 miles northwest of the community of Canyon Creek in Lewis and Clark County.

Please submit any comments that you have by 5 P.M., March 24, 2000 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion of this project is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Virginia Creek Channel Restoration Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purposes of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. This project is being proposed to restore to a proper dimension, pattern and profile approximately 270 feet of stream channel on Virginia Creek. The intent of the project is to provide for a greater diversity in aquatic habitat by removing a 1.5 foot high concrete dam, excavating accumulated silt, and narrowing and deepening the existing channel. The project, involving oversight by a private consultant, is on property owned by Mr. Tim Burton located approximately 9 miles northwest of the community of Canyon Creek in Lewis and Clark County (Figure 1).

I. Location of Project: This project will be conducted on Virginia Creek, a tributary to Canyon Creek. The project area is located approximately 9 miles northwest of the community of Canyon Creek within Township 13 North, Range 7 West, Section 11 in Lewis and Clark County.

II. Need for the Project: Department Goal C indicates that a Fisheries Division objective is to "provide and support programs to conserve and enhance high quality aquatic habitat and protect native aquatic species." The Future Fisheries Improvement Program is a tool to help achieve that objective. Virginia Creek has been degraded by past stream-side management practices; including road encroachment, residential development, clearing of the riparian corridor, placement of low dams and the installation of inadequately sized culverts. These past activities have resulted in stream reaches that are characterized by a shallow, over-widened channel with excessive sediment deposition. Additionally, the under-sized culverts and low dams likely hinder migrations of some species of fish.

III. Scope of the Project:

The proposal calls for removal of a small, 1.5 foot high concrete dam and the re-construction of approximately 270 feet of stream channel by adjusting the stream's dimension, pattern and profile in a manner similar to a Rosgen B4 channel type. Over-widened portions of the channel would be narrowed and deepened using a combination of channel excavation, bank construction, sod placement, and the installation of erosion control fabric (Figure 2). Stream-side vegetation would be enhanced by transplanting willow and other native shrubs and by installing willow sprigs and facines. This project is expected to cost $5,750.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $2,875.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Removal of a small concrete dam and the restoration of over-widened portions of the channel are expected to create a more diverse and healthy habitat for aquatic life. Removal of the dam will facilitate upstream migration of salmonids and the proposed narrowing and deepening of the stream channel is expected to enhance resident trout populations. Habitat for riparian dependent wildlife would also be improved by enhancing the riparian vegetative community by transplanting and sprigging woody shrubs along the stream margin.

2. Water quantity, quality and distribution.

Short term increases in turbidity will occur during project construction. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota. A 310 permit will be obtained from the local Conservation District and the U.S. Army Corp of Engineers will be contacted for requirements needed to meet the federal Clean Water Act (404 permit).

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed during construction. However, disturbed soils would be stabilized by re-vegetation efforts that include sod placement, seeding with a 5 grass species seed mix, transplanting and sprigging woody riparian shrubs and the installation of erosion control fabric.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be disturbed during the period of construction. Proposed re-vegetation efforts, including sod placement, seeding and the transplanting and sprigging of woody riparian shrubs would be used to mitigate for disturbances to vegetation and cover incurred during construction.

5. Aesthetics.

Aesthetics would be enhanced by removing a small concrete dam and by restoring an over-widened reach of stream to a more healthy and natural stream environment. Aesthetics would be further enhanced by the proposed enhancement of the riparian vegetative community.

9. Historic and archaeological sites

The proposed project may require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office has been contacted to determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

It is anticipated that the restoration of 270 feet of Virginia Creek would improve overall aquatic habitat and, as a result, would enhance trout populations residing in the stream. Game fish found in Virginia Creek include brook trout and rainbow trout-westslope cutthroat trout hybrids. The landowner, with prior permission, currently allows public access for fishing.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, a small concrete dam will continue to hinder fish passage. Additionally, this 270 foot segment of Virginia Creek will remain over-widened and shallow. Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

2. The Proposed Alternative

The proposed alternative is designed to restore a degraded, over-widened reach of stream by removing a small concrete dam and by re-constructing the channel to an appropriate dimension, pattern and profile. Removal of the small dam would improve fish passage and the restored channel would be narrowed and deepened, thereby creating a greater diversity in fish habitat. Improvements in the quality of fish habitat likely would enhance the resident rainbow trout-westslope cutthroat trout population and may enhance the resident brook trout population. Aesthetics and recreational oportunities would be expected to be enhanced.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of

the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on the Montana Electronic Bulletin Board.

3. Duration of comment period?

Public comment will be accepted through 5 P.M. on March 24, 2000.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620

Telephone: (406) 444-2432

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title Virginia Creek Channel Restoration Project

Division/Bureau Fisheries Division -Future Fisheries Improvement

Description of Project The project is being proposed to restore to a proper dimension, pattern and profile approximately 270 feet of stream channel on Virginia Creek (a tributary to Canyon Creek). The intent of the project is to provide for a greater diversity in aquatic habitat by removing a small concrete dam, excavating accumulated silt and narrowing and deepening the channel. The project site, involving one landowner and oversight by a private consultant, is located approximately 9 miles northwest of the community of Canyon Creek in Lewis and Clark County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources				X		
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites				X		X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction Lewis and Clark County Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office Individuals or groups contributing to this EA Hydrotech Water Resource Consultants and Mr. Tim Burton, Helena

Recommendation concerning preparation of EIS No EIS required.

EA prepared by : Mark Lere

Date: February 7, 2000

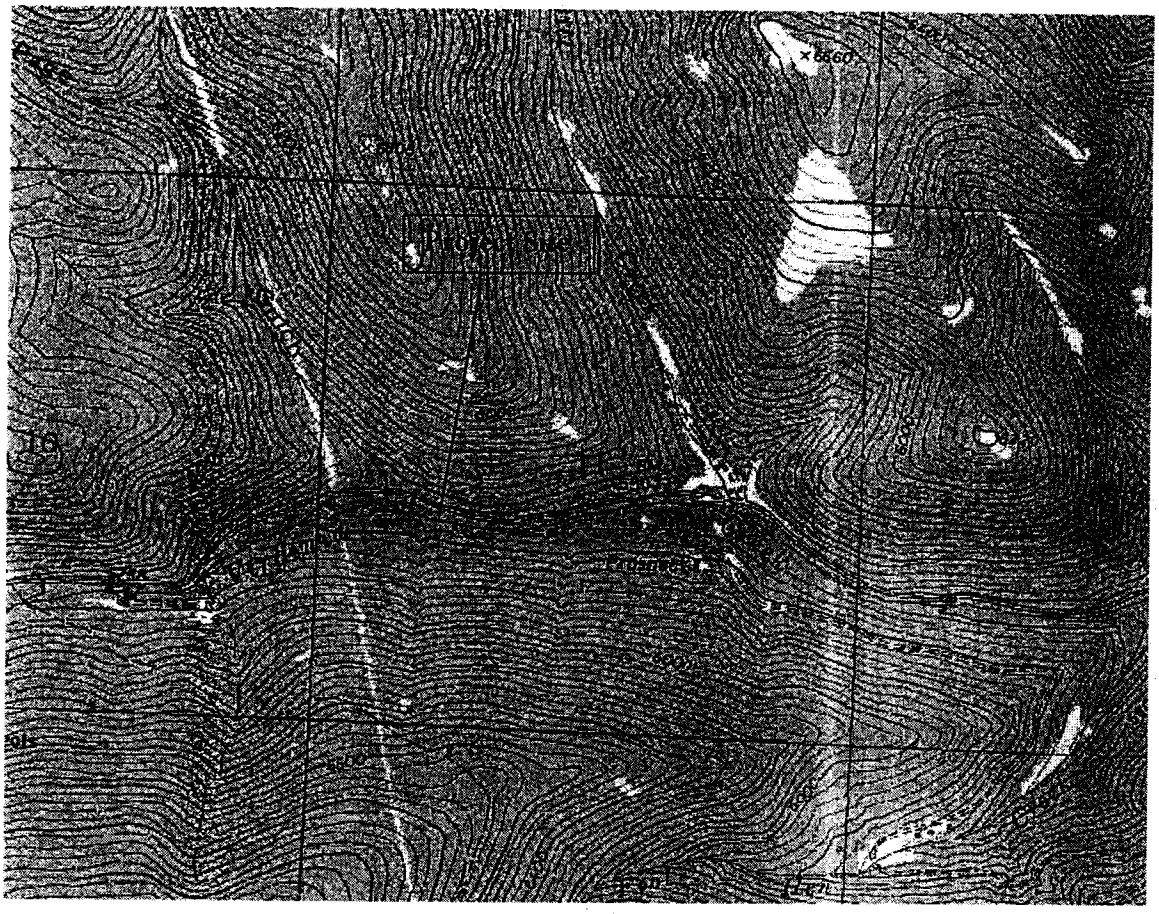

Figure 1. Map showing location of proposed project.

Figure 2. Proposed Restoration on Virginia Creek.